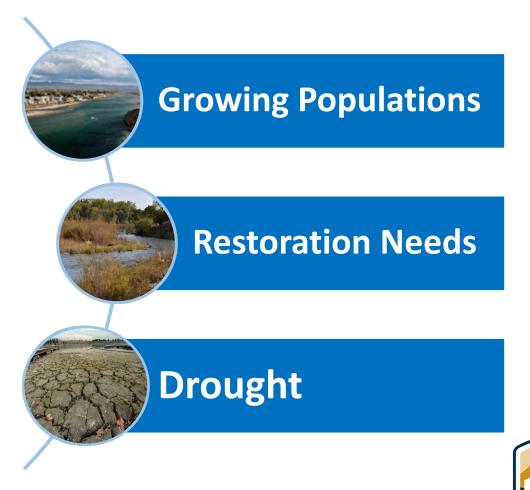


## WaterSMART

Darion Mayhorn, P.E.
Reclamation Drought Coordinator

## WaterSMART Program Overview

- Increases water supply reliability through investments and attention to local water conflicts
- Supports water conservation and water management improvements to help meet competing demands for water
- Leverages Federal and non-Federal funding
- Relies on collaboration with stakeholders to develop local solutions to water supply issues



## WaterSMART Program Overview





## Build a Foundation through WaterSMART

#### **Planning**

Drought Contingency Plans
CWMP Phase I

Water Marketing Strategy Grants

#### Science and Tools

**Applied Science Tools** 

Reservoir Operations Pilots

Water Management Options Pilots

Drought Resiliency Projects

#### On-the-Ground Projects

Drought Resiliency Projects

Water and Energy Efficiency Grants

Small-Scale Water Efficiency Projects

**CWMP Phase II** 



## WaterSMART Program Basics



Most WaterSMART activities are grant programs



Generally a 50% non-Federal cost share is required for grants under WaterSMART



Applicants include entities such as states, tribes, cities, water districts, irrigation districts, watershed groups, non-profits, and flood control districts within the 17 Western United States (and in some cases AK and HI)



Funding is allocated through annual competitive processes



## WaterSMART Funding

Program	FY 2019 Enacted	FY 2020 Enacted
WaterSMART Grants	\$34 million	\$55 million
Cooperative Watershed Management Program	\$2.25 million	\$2.25 million
<b>Basin Study Program</b>	\$5.2 million	\$5.2 million
Title XVI Program	\$58.6 million	\$63.6 million
<b>Drought Response Program</b>	\$9 million	\$8 million
WIIN Act Desalination Projects	\$12 million	\$12 million
Water Conservation Field Services	\$4.2 million	\$4.2 million
Total	\$125.25 million	\$150.25 million



## Drought Response Program

#### **Drought Contingency Planning**

#### **Drought Resiliency Projects**

- Infrastructure Improvements
- New conveyance system components
- Additional water storage
- Recharge facilities
- Capture and treat alternative supplies
- Decision Support Tools & Modeling
- Environmental Protection

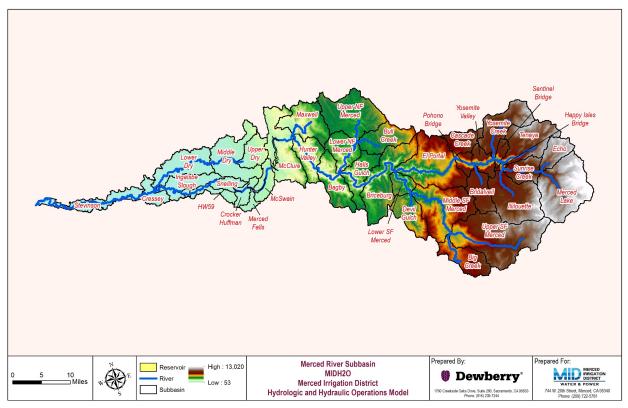




## **Drought Response Program**

#### **Merced Irrigation District**

- Developed a real-time simulation water management model that will help the district analyze, predict, and respond to drought conditions.
- Improved information and forecasting will help the District increase measurement accuracy, monitor river temperature for fisheries benefits, track water uses, minimize system losses, and adjust operations to respond to local conditions in times of drought.



Snapshot of Merced Irrigation District's Hydrologic and Hydraulic Operations Model



## **Drought Response Program**

#### **Alameda County Water District**

- Constructing a fish ladder on the Alameda Creek, allowing the District to avoid lowering the dam during fish migration periods, thereby optimizing their ability to capture stormwater for aquifer recharge.
- The project is expected to provide an additional 1,000-2,000 acre-feet of water annually available for recharge, while providing sufficient bypass flows for migrating rainbow trout.



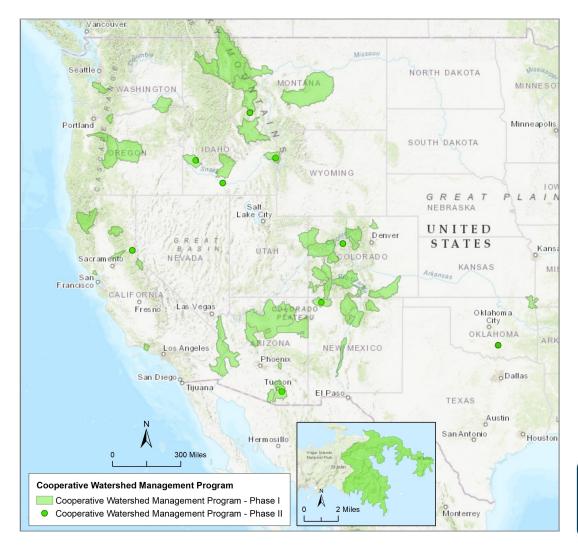


# Cooperative Watershed Management Program

Phase I: Form a watershed group, develop a restoration plan and do project design

#### Phase II: Implement on-theground watershed management projects

- Enhancing riparian vegetation
- Water delivery system improvements
- Increasing instream flows
- Invasive species control
- Fish passage
- Stream channel reconstruction and bank stabilization





## **CWMP - Eagle River Watershed Council**

• Converted the entire length of the JPO ditch to 18,900 linear feet of pipe.

 Anticipated to reduce water loss from seepage and evaporation by 40%, which will remain instream when flows in Abrams Creek are at or below 1.25 cfs – the flow required to maintain the Abrams Creek cutthroat trout population.



# CWMP – Friends of Teton River

- Worked with irrigators to divert water through canals early in the irrigation season, to increase passive recharge into the aquifer
- The recharged water will gradually discharge into the Teton River downstream, increasing base flows by 10-15 cubic feet per second during critical summer months.



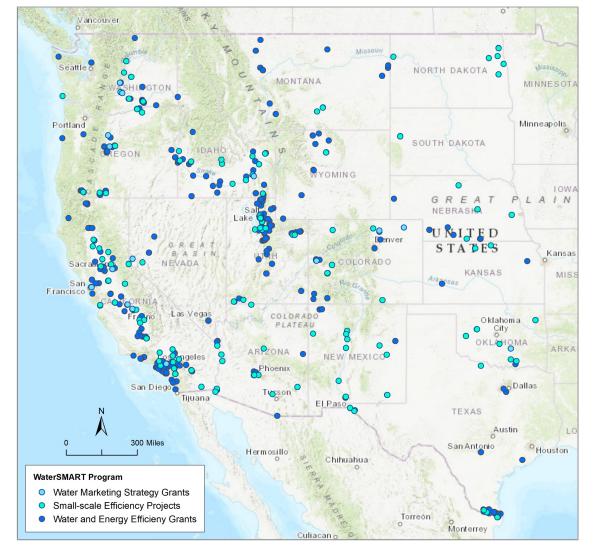
## WaterSMART Grants

#### Water and Energy Efficiency Grants and Small-Scale Water Efficiency Projects

- Canal lining/piping
- Municipal metering
- Irrigation flow measurement
- Landscape irrigation measures

# Water Marketing Strategy Grants

 Water markets between willing buyers and sellers can help meet demands efficiently in times of shortages, preventing conflicts





### WaterSMART Grants

**Cameron County Irrigation District No. 2** 

The open-canal to closed pipe project is expected to result in annual water savings of 337 acre-feet that is currently lost to seepage, evaporation, and bank failures, which will decrease the amount of water pumped from the Rio Grande, leaving more water in-stream for habitat and downstream users, and improving drought resiliency in the area.





## WaterSMART Data Visualization Tool

Data Visualization Tool is an interactive website with program information including:

- Interactive maps
- Featured project tours
- Program growth over time

https://www.usbr.gov/watersmart/

